



# 6<sup>th</sup> US/German Workshop on Salt Repository Research, Design, and Operation

Hotel Pullman Dresden Newa

*September 7 – 9, 2015*



**PTKA**  
Project Management Agency Karlsruhe  
Karlsruhe Institute of Technology



**Sandia National Laboratories**

Verantwortung  
für Generationen  
Responsibility  
for Generations  
**DBE TEC**  
DBE TECHNOLOGY GmbH



Federal Ministry  
for Economic Affairs  
and Energy

# TECHNICAL AGENDA

September 7—Monday

## Day 1

08:00-08:30	Registration	
08:30-08:50	Welcome by the organizers	T. Lautsch, DBE F. Hansen, SNL W. Steininger, PTKA
08:50-09:15	Welcome by BMWi	H.- Ch. Pape, BMWi
09:15-09:30	Welcome by USDOE	N. Buschman, USDOE
09:30-10:00	NEA Salt Club	J. Mönig, GRS

## SAFETY CASE ISSUES

10:00-10:30	IAEA safety standards and the safety case	A. Orrell, IAEA
<b><i>Coffee break</i></b>		
11:00-11:30	Then and now – Assessing updates to 1998 WIPP Modeling	K. Economy, USEPA
11:30-12:00	PFLOTTRAN: Coupled THC simulations	D. Sevougian, SNL
12:00-12:30	RepoTrend: A program system for safety analysis	J. Wolf, T. Reiche, GRS

## ***Lunch***

13:30-14:00	Evaluation and current knowledge for building the Dutch Safety Case	J. Hart, NRG
14:00-14:20	Joint US – D activities on the FEP catalogue /scenario development	J. Wolf, GRS G. Freeze SNL
14:20-14:40	Uncertainty management	D. Becker, GRS

## ***Coffee break***

## OPERATIONAL PHASE ISSUES

15:15-15:45	Probabilistic and deterministic safety assessment approach for shaft hoisting systems	R. Gasull, DBETEC
15:45-16:15	Balancing operational phase and post-operational phase safety	J. Wolf, GRS
16:15-16:45	Monitoring of repositories (EC-Projects Modern and Modern2020)	M. Jobmann, DBETEC

*No evening activity planned.*

# TECHNICAL AGENDA

September 8 —Tuesday

Day 2

## GEOMECHANICAL ISSUES

09:00-09:30	Joint Project on constitutive models: Benchmark calculations of WIPP rooms B and C	A. Hampel Hampel Consulting
09:30-10:00	Topics for future R&D activities focusing on integrity analysis	T. Popp, IfG
10:00-10:30	Integrity of saliferous barriers for heat generating radioactive waste – natural analogues and geomechanical requirements	W. Minkley, IfG
<b>10:30-11:00</b>		
	<i>Coffee break</i>	
11:00-11:20	Content and distribution of fluids in domal and bedded salt: influence on the geomechanical behavior of rocks	M. Pusch, J. Hammer, I. Plischke, BGR
11:20-11:40	Comparison of confined constant strain rate strength tests performed on WIPP clean salt	S. Buchholz, RESPEC
11:40-12:00	Compilation of salt dilatation test data for assessment of variability	L. Roberts, SDSM&T
12:00-12:20	Rock salt dilatancy load path effects	J. M. Hertzsch, BGR
<b>12:20-13:30</b>		
	<i>Lunch and Photo event</i>	
13:30-13:50	The concept of SN fuel and HLW disposal in salt rock in Poland	J. Slizowski, AGH
13:50-14:10	Comparison of rock salt in stratiform and diapiric deposits in Poland – hints for selection and safety of repositories	S. Burliga, UWR
14:10-14:30	Shear strength and deformation of discontinuities in salt	S. Sobolik, SNL
14:30-14:50	Priority testing in a salt URL	C. Leigh, SNL
<b>14:50-15:20</b>		
	<i>Coffee break</i>	
15:20-15:40	Modelling of crushed salt compaction: Recent findings	O. Czaikowski, GRS

## BREAKOUT SESSIONS

15:40-17:00	Safety and demonstration concept for bedded salt (KOSINA project)	W. Bollingerfehr DBETEC
	Comparison of bedded and domal salt for repository application	F. Hansen, SNL
15:40-17:00	FEPs catalogue development	G. Freeze, SNL J. Wolf, GRS
15:40-17:00	Arising issues (to be identified at the workshop)	

19:00

CONFERENCE DINNER

# TECHNICAL AGENDA

September 9—Wednesday

Day 3

## PLUGGING & SEALING

09:00-09:30	In situ verification of a drift seal system in rock salt – preliminary results	R. Mauke, BfS
09:30-10:00	Permanent panel closures at WIPP using run-of-mine salt	C. Gadbury, USDOE
10:00-10:30	Plugging & Sealing projects ELSA and DOPAS	U. Glaubach, TU BAF O. Czaikowski, GRS
<b>10:30-11:00</b> <i>Coffee break</i>		
11:00-11:30	Special topics on sealing materials behavior	H. Mischo, TU BAF
11:30-12:00	Sorel building materials in salt formations (MgO)	D. Freyer, TU BAF

**12:00-13:00** *Lunch*

## SPECIAL TOPICS

13:00-13:30	Update on the ABC-Workshop and Pitzer-database	C. Leigh, SNL V. Metz, KIT/INE
13:30-14:00	BAM-SNL cooperation on container behavior / influence on prolonged interim storage periods	H. Völzke, BAM K. Sorenson, SNL
14:00-14:30	Extended storage approach of COVRA	E. Neeft, COVRA
<b>14:30-15:00</b> <i>Coffee break</i>		
15:00-15:30	Far-field hydrologic modeling around a salt repository	A. Schneider, GRS K. Kuhlmann, SNL
15:30-16:00	Deep borehole disposal: pros & cons of such a concept	G. Freeze, SNL W. Bollingerfehr, DBETEC
Wrap-up, conclusions and outlook		
<b>17:00</b> <i>End of Workshop</i>		